



# TECHNICAL PAINT SERVICES

## PROFESSIONAL SYSTEMS FOR STEEL SUBSTRATES

### Introduction:

This document is designed to provide guidance with the painting of steel surfaces for professional tradesmen.

### Painting Steel:

The painting of steel poses particular problems for the professional applicator. The selection of the correct coating system is critically important if the applicator wishes to maximise performance and life expectancy. In worst case scenarios, the selection of an inappropriate coating system can result in complete failure!

*Correct system selection requires the applicator to make two basic assessments:*

#### 1) The nature of the environment:-

Obviously the systems that would be required for painting the Village Hall railings out in the countryside where the corrosive intensity of the environment is relatively low, would not be the same as those for painting an offshore industrial structure where the corrosive intensity of the environment is going to be extremely high.

**Environments are graded in terms of corrosive intensity in accordance with ISO 9223 as follows:**

#### **C1 Very Low**

Inside heated buildings with clean atmosphere.

#### **C2 Low**

Areas with low levels of pollution and a dry climate. Rural areas and the inside of unheated buildings.

#### **C3 Medium**

Urban and light industrial atmospheres with moderate levels of sulphur dioxide pollution.

#### **C4 High**

Industrial areas and coastal areas with moderate salinity.

#### **C5 Very High**

Extreme industrial areas and coastal or offshore facilities with high salinity.

#### 1) The condition of the substrate and the degree of preparation that can be undertaken:-

If the substrate is previously painted and in good condition then it is likely to require a different system to a substrate that is for instance, previously unpainted and rusting very badly.

Additionally, a substrate that can be prepared by abrasive blast cleaning to a very high degree of cleanliness is likely to warrant an alternative approach in terms of coating selection to a substrate that can only be wired brushed.

*The following standards apply:*

**Abrasive blast cleaning in accordance with BS7079 Part A:**

- SA3 White Metal
- SA2.5 Near White Metal
- SA2 Commercial Blast

**Manual preparation in accordance with BS7079 Part C:**

- ST3 Very Thorough Manual Preparation
  - ST2 Thorough Manual Preparation
- Most specifications will call for SA2.5 when abrasive blast cleaning is required and ST3 when manual preparation is required.

Technical Paint Services produce an extensive range of systems that are designed and manufactured for use on steel substrates, see below. Full details can be found on our website.

<b>STEEL (Mild)</b>	A1	Bituminous Finish
	AG1	Contract Grade Bituminous Finish
	B1/10	Bituminous Glossy Black
	B2	Drinking Water Tank Black
	R10	Chlorinated Rubber
	RG10	Contract Grade Chlorinated Rubber
	R12	Chlorinated Rubber Micaceous Iron Oxide
	A30	Floor Finish Alkyd
	AG30	Contract Grade Floor Finish Alkyd
	A36	Two-Pack Epoxy Floor Finish
	AG36	Contract Grade Two-Pack Epoxy Floor finish
	A37	Two-Pack Epoxy Floor finish, Non-Slip
	AG37	Contract Grade Two-Pack Epoxy Floor finish, Non-Slip
	A40	Two-Pack Polyurethane Floor Finish
	WBF42	Water based Fluorescent System
	WGBF42	Contract Grade Water based Fluorescent System
	H44	Heat Resisting High Temperature
	H45	Heat Resisting Medium Temperature
	H46	Heat Resisting Low Temperature
	A46	Silicone Alkyd Finish
	WBP72/30	Water based Phosphorescent Finish
	AP79	Universal Primer
	AP83	Zinc Rich Galvanic Primer
	UP88	One-Pack Etch Primer
	UP89	Two-Pack Etch Primer
	UP90	Two-Pack Exterior Etch Primer
	A94	Reflective Finish
	A109	Synthamel
	AG109	Contract Grade Synthamel
	A110	Foramel Finish
	A111	Synthicoach Finish
	A112	Synthaflocac Finish
	A113	One-Pack Polyurethane
	A114	Two-Pack Epoxy Finish
	AP115	Two-Pack Epoxy Primer

	A116	Two-Pack Epoxy Coal Tar Pitch
	A117	Two-Pack Polyurethane
	A133	Identification Security Quick Drying
	A134	Identification Security Paint
	AP136	Micaceous Iron Oxide Phenolic Tung Undercoat
	A1006	Protekt It!
	R1007	Acrylated Rubber system
	MSP1009	Shellac based Multi Surface Primer & suitable finish coat

In summary, every Technical Paint Services product has an associated Technical Data Sheet and a Material Safety Data Sheet; these can be found on our website in our “Products” pages.

Please look at these Data Sheets for each product you are using and also consider the environment in which you will be working, both internally and externally. Remember that during cooler weather, curing and drying are as important as application. Good planning and management will help enormously; very often it makes good sense to leave a project until warmer weather arrives.

To be absolutely certain of the right choice of product as well as the correct use and application instructions, please email or call us on **0845 230 1244** before placing an order.